



STRATEGIC MARKET PERSPECTIVE

Business Process Re-engineering in the Federal Government

Federal IT Market Analysis Program

J U N E 1 9 9 4

Business Process Re-engineering in the Federal Government

INPUT LIBRARY

INPUT[®]

Frankfurt • London • New York • Paris • San Francisco • Tokyo • Washington, D.C.

Clients make informed decisions more quickly and economically by using INPUT's services. Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, research, objective analysis and insightful opinions to prepare their plans, market assessments and business directions, particularly in computer software and services.

Contact us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

SUBSCRIPTION SERVICES

- Information Services Markets
 - Worldwide and country data
 - Vertical industry analysis
- Business Integration Markets
- Client/Server Applications and Directions
- Client/Server Software
- Outsourcing Markets
- Information Services Vendor Profiles and Analysis
- EDI/Electronic Commerce
- U.S. Federal Government IT Markets
- IT Customer Services Directions (Europe)

SERVICE FEATURES

- Research-based reports on trends, etc. (Over 100 in-depth reports a year)
- Frequent bulletins on events, issues, etc.
- 5-year market forecasts
- Competitive analysis
- Access to experienced consultants
- Immediate answers to questions
- On-site presentations
- Annual conference

DATABASES

- Software and Services Market Forecasts
- Software and Services Vendors
- U.S. Federal Government
 - Procurement Plans (PAR)
 - Forecasts
 - Awards (FAIT)
- Commercial Application (LEADS)

CUSTOM PROJECTS

For Vendors—analyze:

- Market strategies and tactics
- Product/service opportunities
- Customer satisfaction levels
- Competitive positioning
- Acquisition targets

For Buyers—evaluate:

- Specific vendor capabilities
- Outsourcing options
- Systems plans
- Peer position

OTHER SERVICES

Acquisition/partnership searches

INPUT WORLDWIDE

Frankfurt
Sudetenstraße 9
D-35428 Langgöns-
Niederkleen
Germany
Tel. +49 (0) 6447-7229
Fax +49 (0) 6447-7327

London
17 Hill Street
London W1X 7FB
England
Tel. +44 (0) 71 493-9335
Fax +44 (0) 71 629-0179

New York
400 Frank W. Burr Blvd.
Teaneck, NJ 07666
U.S.A.
Tel. 1 (201) 801-0050
Fax 1 (201) 801-0441

Paris
24, avenue du Recteur
Poincaré
75016 Paris
France
Tel. +33 (1) 46 47 65 65
Fax +33 (1) 46 47 69 50

San Francisco
1881 Landings Drive
Mountain View
CA 94043-0848
U.S.A.
Tel. 1 (415) 961-3300
Fax 1 (415) 961-3966

Tokyo
Saida Building, 4-6,
Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101
Japan
Tel. +81 3 3864-0531
Fax +81 3 3864-4114

Washington, D.C.
1953 Gallows Road
Suite 560
Vienna, VA 22182
U.S.A.
Tel. 1 (703) 847-6870
Fax 1 (703) 847-6872

Abstract

Many agencies have been involved in re-engineering their major programs and IT support for several years. With the NPR study initiated in 1993, all agencies are challenged to reinvent the way they operate. The challenge is to work better and cost less.

The government IT budgets have been steadily increasing over the past 10 years. The current compound annual growth rate (CAGR) of the dollars contracted out is 6.3%. This represents an increase in FY98 to \$24.3 billion over the \$19.0 billion for FY94. BPR implies major system redesign with a focus on technology infusion. The current planned expenditures do not consider the BPR impact.

This report discusses the status of BPR in the government. It presents the results of agency interviews and other pertinent studies and surveys done on the subject. It also summarizes the principle NPR recommendations and specific agency recommendations.

This report, *Business Process Re-Engineering in the Federal Government*, offers insight to vendors and integrators as to the business potential that can develop from this major government initiative.

Published by
INPUT
1953 Gallows Road, Suite 560
Vienna, VA 22182
United States of America

Federal IT Market Analysis Program

Business Process Re-engineering in the Federal Government

Copyright © 1994 by INPUT. All rights reserved. Printed in the United States of America. No part of the publication may be reproduced or distributed in any form, or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

The information provided in this report shall be used only by the employees of and within the current corporate structure of INPUT's clients, and will not be disclosed to any other organisation or person including parent, subsidiary, or affiliated organisation without prior written consent of INPUT.

INPUT exercises its best efforts in preparation of the information provided in this report and believes the information contained herein to be accurate. However, INPUT shall have no liability for any loss or expense that may result from incompleteness or inaccuracy of the information provided.

Table of Contents

I	Introduction	I-1
	A. Scope	I-1
	B. Methodology	I-2
	C. Report Organization	I-3
II	Executive Overview	II-1
	A. Management Perspective	II-1
	B. Findings	II-4
	C. Conclusions	II-5
III	Survey and Other Findings	III-1
	A. BPR Motivation	III-1
	B. INPUT Survey Results	III-2
	1. How Does Your Agency Characterize or Define BPR?	III-2
	2. To What Degree Is Your Agency Focusing on BPR?	III-3
	3. What Are the Primary Focus Areas?	III-3
	4. How Long Has Your Agency Been Doing BPR?	III-4
	5. Are Your Agency Objectives Incremental or Comprehensive Changes?	III-4
	6. What Is the Primary Motivation for Undertaking BPR?	III-5
	7. How Long from the Time Your Agency Initiated BPR Before You Anticipate Measurable Results?	III-5
	8. How Will Your Agency Measure Success?	III-6
	9. What Is Your Level of Confidence That Your Agency Will Meet Its Objectives in BPR?	III-7
	10. What Are the Major Impediments in Achieving Stated Objectives?	III-7
	11. Is Your Agency Currently Using or Planning to Use Outside Consultants to Support BPR?	III-8
	12. Which Vendors Do You Believe Have Expertise and Experience to Do BPR?	III-8

13.	Do You Anticipate Significant System Redesign As a Result of BPR? Is Your Agency Currently Performing or Planning System Redesign As a Result of BPR? (Questions 13 and 14)	III-9
14.	If You are Doing or Planning System Redesign, Will You Use Outside Vendors or System Integrators?	III-9
15.	How Significant Do You Feel Hardware, Software, Networks and Professional Services Will Be in Any System Design/Redesign Resulting from BPR?	III-10
C.	Other Significant Information Sources	III-10
1.	GSA's Draft Study Published February 1994— <i>Lessons Learned to Date from Business Process Re-engineering in the Federal Government</i>	III-10
2.	NAPA BPR Conference March 9-10, 1994 for Agency Executives	III-12
3.	NAPA Sponsored Survey	III-12
D.	Summary	III-13

IV

	NPR Principles and Recommendations	IV-1
A.	NPR Principles	IV-1
1.	Cutting Red Tape	IV-2
2.	Putting the Customer First	IV-3
3.	Empowering Employees to Get Results	IV-3
4.	Cutting Back to Basics	IV-4
B.	Agency NPR Recommendations	IV-5
1	Department of Agriculture (USDA)	IV-6
2	Department of Commerce (DoC)	IV-7
3.	Department of Defense (DoD)	IV-8
4.	Department of Education (ED)	IV-8
5.	Department of Energy (DoE)	IV-9
6.	Environmental Protection Agency (EPA)	IV-9
7.	Federal Emergency Management Agency (FEMA)	IV-9
8.	Department of Health and Human Services (HHS)	IV-9
9.	Housing and Urban Development (HUD)	IV-10
10.	Department of the Interior (DOI)	IV-10
11.	Department of Justice (DoJ)	IV-11
12.	Department of Labor (DoL)	IV-11
13.	National Aeronautics and Space Administration (NASA)	IV-12
14.	Department of State (DoS)	IV-12

15. Department of Transportation (DoT)	IV-12
16. Department of the Treasury (TRE)	IV-13
17. Department of Veterans Affairs (DVA)	IV-13
C. Federal Agency IT Spending	IV-14

A	Questionnaire	A-1
	A. Survey Letter	A-1
	B. Questionnaire	A-3
	C. List of Agencies Interviewed	A-5

B	Glossary of Acronyms and Definitions	B-1
	A. Acronyms	B-1
	B. Definitions	B-3

C	References/Sources	C-1
---	--------------------	-----

Exhibits

II

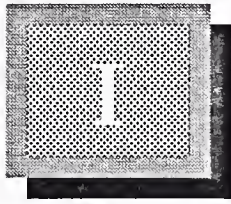
- | | | |
|----|---------------------------------------|------|
| -1 | Information Technology Budget, FY1994 | II-3 |
| -2 | Market Forecast | II-3 |

III

- | | | |
|-----|--|-------|
| -1 | How Agencies Characterize BPR | III-3 |
| -2 | Degree of Focus | III-3 |
| -3 | Agency Focus Areas | III-4 |
| -4 | How Long Agency Has Been Doing BPR | III-4 |
| -5 | Type of Change Anticipated | III-5 |
| -6 | Primary Motivators for BPR | III-5 |
| -7 | Measurable Results | III-6 |
| -8 | How Results Will be Measured | III-6 |
| -9 | Level of Confidence of Successful BPR | III-7 |
| -10 | Major Impediments | III-8 |
| -11 | Use of Consultants | III-8 |
| -12 | Significant System Redesign | III-9 |
| -13 | Use of Outside Support for System Redesign | III-9 |

IV

- | | | |
|----|---|-------|
| -1 | Contracted Portion of Federal IT Budget | IV-15 |
|----|---|-------|



Introduction

This report is produced by INPUT as part of the Federal Information Technology Market Analysis Program. The report covers the status of Business Process Re-engineering (BPR) in the federal government. This is a relatively new concept in the government and has been motivated, in a large part, by the voice of the American people. The current administration has made a commitment to respond to the concerns expressed and reinvent government to better serve the people. Vice President Gore was tasked to conduct a study to initiate this activity. The Vice President's study, *Creating a Government that Works Better and Costs Less*, a report of the National Performance Review, is a first step in this process.

INPUT undertook this study because of the emphasis BPR is receiving. Any actions that result from it will be significant to the IT industry. Specific plans and actions are being addressed by most agencies. INPUT will continue to track BPR activities in the government and publish information and analyses on specific agency and functional plans as they evolve.

A

Scope

For this report, INPUT is using the term BPR to represent that collection of activities being performed by government agencies that support the president's initiative of making the federal government less costly and more efficient. This encompasses fundamental rethinking of business processes, organizational structure, management systems and values of an organization aimed at achieving dramatic breakthroughs in performance measures, as well as process improvements aimed at incremental changes in

performance. The performance measures most frequently addressed are cost, quality, customer service and speed.

Published literature speculates that BPR will be more difficult in government than industry. It is also expected to take longer. INPUT estimates that the next two to three years will be spent in evaluating and defining new processes geared toward streamlining government. Agency need for BPR support will continue and should increase during that period. Specific programs will begin to evolve, and this process will continue and be an ongoing activity. Specifically, measurable results from the current recommendations and resultant actions may take eight to ten years to materialize.

B

Methodology

The report's findings are based on research and analysis of several sources, including:

- Interviews and discussions with agency personnel involved in BPR activities.
- Review and analysis of the National Performance Review Report and accompanying reports, as available
- Review of the budget of the United States government for fiscal year 1995
- Agency five-year strategic and information technology plans, as available
- Participation in the Public-Sector Re-engineering Symposium for Government Managers sponsored by the National Academy of Public Administration in March 1994.
- INPUT's Procurement Analysis Reports
- Secondary research sources, industry journals and reports
- Interviews and discussions with industry executives in the federal IT market
- Related General Accounting Office Reports

C

Report Organization

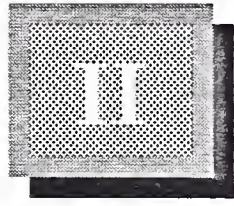
This report consists of three additional sections:

- Section II is an Executive Overview describing the major management concerns, findings and conclusions of this report.
- Section III summarizes the motivation for doing BPR, agency interviews performed by INPUT along with other studies and surveys conducted on this subject that contribute to a better understanding of the business opportunities and challenges for the IT industry.
- Section IV summarizes the principles identified in the report of the National Performance Review and the agency recommendations that have IT implications. GAO's comments on these recommendations are also discussed. For the agencies included, the FY94 IT budget and INPUT's forecast for the FY98 budget are presented.

Several appendixes are also included:

- Definitions and Acronyms
- References
- Questionnaire

(Blank)



Executive Overview

This section describes major management concerns relative to BPR as well as findings and conclusions from the research performed to develop this report.

A

Management Perspective

Business process re-engineering should not be viewed as individual programs or procurements. It is a business approach that demands a rigorous and objective look at an organization's business and the processes used to perform necessary functions. Business process re-engineering in the federal government today is being used to address the president's challenge to the entire federal government to reinvent itself and become more customer-oriented and efficient. It can be no less than a long and difficult journey.

Deficit reduction is a high priority issue with the current administration and most agencies are having to deal with overall budget reductions. Research and development as well as information technology (IT) are two areas that are experiencing an overall increase in budget allocation.

The need to undertake BPR activities in an era of budget reductions or declining revenues is not unusual. Published literature indicates that most successful BPR initiatives in industry have come about out of necessity to reduce costs, improve customer service and, at the same time, improve profits. Successful industry initiatives in BPR have required investment of key people, time and money. If agency initiatives are to be successful, top-level management will have to recognize that key personnel must be dedicated to the process. Without the up-front investment, BPR will produce no more measurable or significant results than total quality

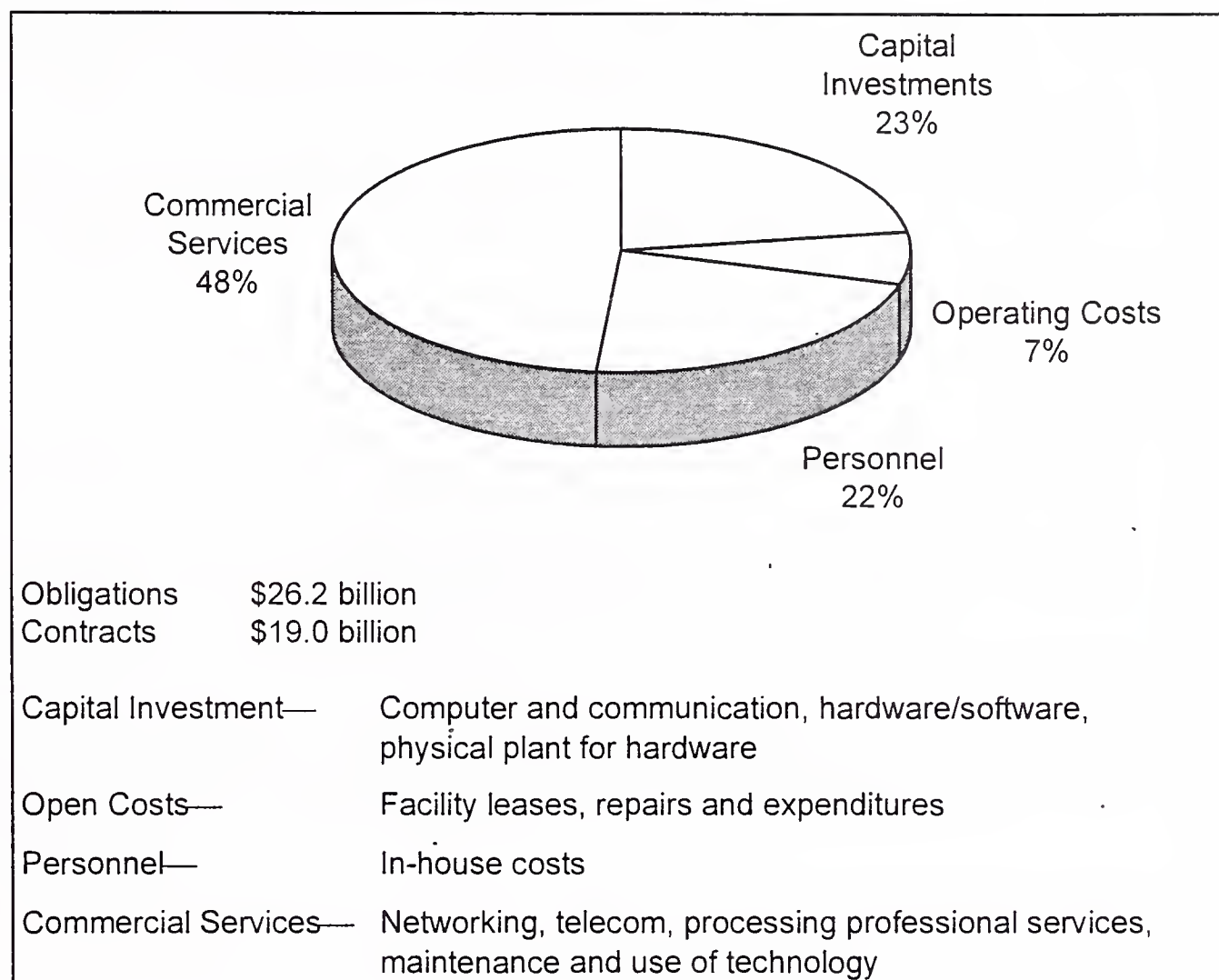
management, zero-based budgeting or any of the other initiatives that have been pursued in recent years.

IT is viewed as one of the key ingredients that will allow agencies to redesign their current programs and procedures. Overall IT expenditures have been growing. In FY82, IT represented 1.23% of the federal budget expenditure—by FY92 that percentage had grown to 1.7%. In real dollars the growth was from \$9.1 billion in FY82 to \$22.1 billion in FY92. The IT expenditures must be kept in line with, and must not usurp, program funds. However, it is reasonable to assume that implementation of the re-engineered processes will exceed current projected budget figures if the country is to profit by a reshaped government by the turn of the century.

Exhibit II-1 illustrates the FY94 IT budget request for the four primary components reported by the agencies and published by the Office of Management and Budget (OMB). INPUT's estimate of the growth of the IT budget in FY98 is shown in Exhibit II-2. These dollars represent the agency estimate and INPUT's forecast prior to the emphasis on BPR. The missing ingredient is the recognition of the investment that will be required to allow the technology infusion that successful BPR initiatives will require—the recognition that the government will have to invest initially to save money for the long run.

Exhibit II-1

Information Technology Budget, FY1994



Source: OMB

Exhibit II-2

Market Forecast

	FY94	FY98	CAGR
Capital investment	5.9	6.8	3.6
Personnel	5.6	5.2	- 1.8
Operations	1.8	2.1	3.9
Commercial services	12.7	17.1	7.7
Total	26.2	31.2	4.5
Contracted portion	19.0	24.3	6.3

\$ Billion

Source: OMB, INPUT

The FY95 budget, Section 3C, addresses delivering a government that works better and costs less. This document conveys the

message that the current administration believes it inherited a government with a trust deficit; that the American people believe neither they, nor their tax dollars, are treated with due respect; that the government can or will change. The following is quoted from this section of the budget document.

"To be a vital partner in economic renewal and prosperity, the federal government must rise to three challenges:

- It must rebuild public trust.
- It must work better and cost less.
- It must stay in step with—not drag down—the public sector."

The public sector has made significant investment in many industries to renew its competitiveness, reduce cost and improve quality in order to be able to compete in today's global economy. The federal government, with annual expenditures of more than 23% of the Gross Domestic Product (GDP) has an enormous challenge, but to meet this challenge, must do the same.

B

Findings

The following findings resulted from this study which include agency interviews and published reports and surveys addressing BPR.

- The majority of the BPR activity in the government is focused on process change and improvement and does not equate to the published definition of BPR.
- Agency focus on BPR is in selected areas or a functional area that cuts across an entire organization.
- Agencies have identified a wide range of administrative as well as selected functional areas as their focus for BPR.
- One-third of those interviewed indicated that their agency has been involved in BPR for less than six months.
- The magnitude of change anticipated (incremental or comprehensive) was viewed as being dependent on the function.

- Improved customer satisfaction was stated as the primary motivation for doing BPR.
- Measurable results are anticipated by a majority in one to two years from the time that BPR is initiated.
- The need to define measurements was recognized by all, and improved customer satisfaction was identified as the primary measure.
- The majority of the personnel interviewed indicated an 80% confidence that their agency efforts would be successful.
- The ability of the organization to undergo the culture change necessary was identified as the major impediment to successful BPR. Other significant impediments identified were lack of funding, lack of executive commitment and political pressures.
- The majority of the agencies are using or planning to use outside consultants to support BPR. One interesting comment referenced using BPR consultants from another government agency.
- There was no consensus on vendors who could support BPR activities.
- Significant system redesign is anticipated by the majority of agencies as a result of BPR.

C

Conclusions

Federal agency officials have expressed that they understand, and are sincerely and enthusiastically in support of doing BPR. This expression comes from many sources, not just the INPUT interviews.

At the same time, there is a fundamental concern that the top-level, executive support required will not be sustained long enough to see results. An ancillary concern is the turnover of political appointees whose average time in service is two years. This concern is well founded.

In addition to the continuity of service and support from top-level executives is the concern that these personnel do not appreciate the

enormity of the tasks being undertaken, the personal time and support required from them, and the additional resources—people and money, to do the job. This concern, with only a few exceptions, is also well founded.

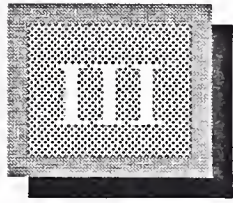
The majority of the re-engineering activity more closely aligns with business process improvement rather than business process re-engineering. Considering the business of government, external and political pressures, this is a reasonable approach to BPR.

BPR is a relatively new concept in the government. To undertake the challenge of reinventing the entire government simultaneously presents great risk. Training in the tools to support BPR, as well as training in how to do BPR, has been insufficient. In addition, overall employee training as to what implications BPR has to their organization and to the individual is lacking and has generated employee concerns.

Agency officials recognize the need to develop measurable results for their BPR activities. This is evidenced by the surveys and studies referenced in Section III of this report. Improved customer satisfaction is a key measure that is planned, but in many instances there is no quantifiable measure of customer satisfaction today.

With the exception of the Social Security Administration's work at reinventing its disabilities claims processing system, there is little, if any, funding that has been designated to support BPR.

The entire BPR process is new enough and planning is in such early stages that specific estimates as to the business potential for BPR cannot be estimated. The same is true with the projected size of the implementation market that will result from the current BPR activity. The level of activity and interest in BPR in the government makes it an area that industry must continue to track.



Survey and Other Findings

This chapter summarizes the motivation for doing BPR, the results of agency interviews performed by INPUT and other pertinent studies and surveys done on the subject of BPR. This information should contribute to companies pursuing business with the federal government and provide a better understanding of the issues, as well as help focus strategic planning relative to BPR opportunities.

A

BPR Motivation

Business process re-engineering (BPR) is a relative new concept. It has been applied, with measurable success, in many instances in industry. Published literature claims that applying BPR in government—local, state or federal—is more difficult than in industry. Government agencies normally do not control their budgets and are subject to political pressures. They have different practices to hiring and firing and usually cannot decide in what business they want to be. In contrast, most companies answer only to the Board of Directors and stockholders and the level of control and influence is removed from the day to day activities.

The thrust of using BPR in the federal government originated with the current administration's intent and desire to reinvent government. This intent and desire grew out of concerns expressed to the president and vice president during the last election and "town meetings" and similar events they have held subsequent to the election. The reinvention initiative started in March 1993, when President Clinton announced a six-month review headed by Vice President Gore. This study was identified as the National Performance Review (NPR). The goal of the review was to identify problems and offer recommendations and ideas for savings. It

focused on how government should work, not on what it should do. Individual agency reports have been, or are being developed, to address recommendations resulting from NPR. In addition, follow on NPR studies addressing culture change, process and system reinvention and role restructuring have been published or are under development. These are published as Accompanying Reports to the NPR Review. Because the government is dealing with broad concepts, undefined programs, procurement delays and must rely on this and subsequent administrations, BPR in the government will be an ongoing, and potentially tenuous process for the next several years. Results from the current set of NPR recommendations and related actions should accrue over the next five to ten years, beginning with programs like the redesign of the Social Security Administration's disability claims processing.

B

INPUT Survey Results

INPUT developed a questionnaire to be used in interviewing agency personnel. The purpose of the questionnaire was to identify agency interest and commitment to BPR and to understand the status of BPR activities within the agency. INPUT sent out 72 letters to agency officials requesting their participation in the survey. INPUT contacted 46 of those who had received letters. This represented 24 departments or independent agencies. Of those contacted, 11 were willing to participate. This participation represents eight departments or independent agencies. The results of these interviews are discussed below. The survey questionnaire is included in Appendix C.

1. How Does Your Agency Characterize or Define BPR?

The majority of the personnel interviewed stated that their agency focus was on process change and improvement and is more akin to Business Process Improvement (BPI) than BPR and that a major motivator was the desire to improve on current processes rather than a need to actually challenge the mission of the organization. Exhibit III-1 characterizes the responses relative to agency intent to use BPR, BPI, or both.

Exhibit III-1

How Agencies Characterize BPR

How Agencies Characterize BPR	Number of Respondents
Traditional Use of BPR	3
BPI Approach	6
Plan to Use Both	2

Source: INPUT

2. To What Degree Is Your Agency Focusing on BPR?

The majority of the personnel interviewed indicated that their agency was focusing in selected areas. Exhibit III-2 summarizes the responses as to selected areas, the entire organization, or a specific, mission-oriented function across the entire organization.

Exhibit III-2

Degree of Focus

Level of Focus	Number of Respondents
Selected Areas	7
Entire Organization	1
Mission-oriented, Selected Area	3

Source: INPUT

3. What Are the Primary Focus Areas?

There was no central theme. Focus areas varied across a wide range of administrative functions to agency mission-specific areas. The responses are tabulated in Exhibit III-3 under administrative and other functions.

Exhibit III-3

Agency Focus Areas

Focus Areas	Number of Responses
Administrative Functions	18
Program/Mission Specifics	6
Other	3

Source: INPUT

4. How Long has Your Agency been Doing BPR?

There was a spread in the length of time agencies have been involved in BPR. The specific responses are tabulated in Exhibit III-4. These responses demonstrate that BPR activities actually preceded recommendations of the NPR.

Exhibit III-4

How Long Agency Has Been Doing BPR

Length of Time	Number of Respondents
< 6 Months	4
6 - 12 Months	0
1 - 2 Years	3
> 2 Years	4

Source: INPUT

5. Are Your Agency Objectives Incremental or Comprehensive Changes?

Personnel interviewed were split as to the magnitude of the change anticipated. The change was characterized as "incremental," "comprehensive" or "depends on the function." The responses are tabulated in Exhibit III-5.

Exhibit III-5

Type of Change Anticipated

Type of Change	Number of Respondents
Incremental	4
Comprehensive	4
Depends on Function	3

Source: INPUT

6. What Is the Primary Motivation for Undertaking BPR?

Customer satisfaction, cost reduction, improved productivity and technology insertion were the motivators most frequently mentioned for doing BPR. Other interesting comments made relative to the motivation for doing BPR included: the opportunity to actually engineer a process that had never been engineered; congressional mandate; budget cuts; improved personnel utilization; and fraud reduction. Exhibit III-6 tabulated the responses.

Exhibit III-6

Primary Motivators for BPR

Motivator	Number of Responses
Improved Productivity	10
Cost Reduction/Avoidance	7
Technology Insertion	6
Customer Satisfaction	5

Source: INPUT

7. How Long from the Time Your Agency Initiated BPR Before You Anticipate Measurable Results?

The time expressed before measurable results would be achieved is tabulated in Exhibit III-7. Two of the respondents indicated that their measurable results within the 6-12 month period would be a plan of action. One of the respondents indicated that it would take

over two years for a comprehensive plan to be developed. One respondent indicated a plan within six months and other measurable results within 1-2 years.

Exhibit III-7

Measurable Results

Measurable Results	Number of Respondents
< 6 Months	1
6 - 12 Months	3
1 - 2 Years	4
> 2 Years	4

Source: INPUT

8. How Will Your Agency Measure Success?

Improved customer satisfaction, financial management and productivity are the measures mentioned. This tracks the primary motivators illustrated in Exhibit III-6. The necessity of measuring results was understood by all. Those that mentioned metrics stated that they either existed or would be developed as a part of the planning process. The specific responses are tabulated in Exhibit III-8.

Exhibit III-8

How Results Will be Measured

Measurements	Number of Responses
Improved Productivity	8
Improved Customer Satisfaction	7
Improved Financial Management	5
Do Have or Will Establish Metrics	4

Source: INPUT

9. What Is Your Level of Confidence That Your Agency Will Meet Its Objectives in BPR?

The majority of the personnel interviewed indicated an 80% or more confidence that their agency efforts would be successful. This 80% confidence was characterized along with comments like: the agency will survive—we will be successful by definition; we will at least be successful in technology insertion; we will fix or stop doing; we will be successful in step function improvements. The specific numerical responses are tabulated in Exhibit III-9.

Exhibit III-9

Level of Confidence of Successful BPR

Confidence	Number of Respondents
0%	0
> 20%	1
> 50%	1
> 80%	7
100%	2

Source: INPUT

10. What Are the Major Impediments in Achieving Stated Objectives?

The ability of the organization to undergo the culture change necessary to actually change processes and procedures was the major concern expressed. Other comments centered around the issue of management commitment and support. The comments relating to impediments are tabulated in Exhibit III-10.

Exhibit III-10

Major Impediments

Impediment of Successful BPR	Number of Responses
Need to Change Culture	11
Management Commitment and Longevity	8
Outside Pressure (Political and Congressional)	4
Lack of Funding	2

Source: INPUT

11. Is Your Agency Currently Using or Planning to Use Outside Consultants to Support BPR?

The majority of those interviewed indicated that they were currently using or planning to use outside consultants to support their BPR activities. The specific responses to this question are tabulated in Exhibit III-11.

Exhibit III-11

Use of Consultants

Plan to Use or are Using Consultants	Number of Respondents
Yes	7
No	3
Using Other Government Agency Personnel	1

Source: INPUT

12. Which Vendors Do You Believe Have Expertise and Experience to Do BPR?

There was no consensus on this question and agency responses varied from no response to many relative to vendors who had expertise in BPR.

13. Do You Anticipate Significant System Redesign As a Result of BPR? Is Your Agency Currently Performing or Planning System Redesign As a Result of BPR? (Questions 13 and 14)

In response to these questions, the majority of the responses were yes. The specific tabulations are presented in Exhibits III-12.

Exhibit III-12

Significant System Redesign

Significant System Redesign	Number of Respondents
Yes	9
No	2

Source: INPUT

14. If You are Doing or Planning System Redesign, Will You Use Outside Vendors or System Integrators?

The majority of the personnel interviewed indicated plans to use either vendors or system integrators in their system redesign efforts. One respondent had no comment on this question. Both this question and question 11 indicate emphasis on using outside support. Figure III-13 tabulates the responses.

Exhibit III-13

Use of Outside Support for System Redesign

Outside Support	Number of Responses
System Integrators	7
Vendors	6
BPR Consultants	3
No Outside Support	1

Source: INPUT

15. How Significant Do You Feel Hardware, Software, Networks and Professional Services Will Be in Any System Design/Redesign Resulting from BPR?

There was no response to this question from three of those interviewed. Two of the respondents indicated that professional services was more important than the hardware, software and networks. The remainder of the respondents indicated that the hardware, software and networks were equally important and were more important than professional services.

C

Other Significant Information Sources

1. GSA's Draft Study Published February 1994 *Lessons Learned to Date from Business Process Re-engineering in the Federal Government*

This GSA study reviews the status of eight agency initiatives involving process redesign that focus on improved customer service. The lessons learned that are summarized are from the Social Security Administration, Internal Revenue Service, Veterans Administration, Department of Agriculture, Securities and Exchange Commission, Federal Bureau of Investigation, Geological Survey and Bureau of Prisons.

The study supports the concept that BPR and BPI are relatively new concepts in the federal government, but acknowledges that the agencies are excited about the possibility of streamlining their processes and procedures. The study further states that the majority of the participants interviewed believe that the BPR process is much more difficult in the government than in industry. The key differences identified are:

- Tenure of executives is much less than in industry
- Government requirement to deal with legislative mandates
- Control of the agency budget and program process is external to the agency
- Lengthy federal procurement process

In addition, agency personnel who participated in this GSA study identified critical success factors and the report summarized them to be:

- Top-level management support is critical—This is viewed as more critical than in industry due to the need to defend programs within the Executive Branch and also to Congress.
- Long-term commitment is critical—The tenure of political appointees in the government averages two years. This presents a significant challenge for long-term support for BPR/BPI initiatives. Success requires top-level support during the implementation as well as the planning phases. Lack of long-term support has contributed to, or been the cause of, failure of BPR efforts in industry. It is no less of an issue in government.
- High-quality staffing is critical—BPR planning requires the "best and brightest" from key elements of an organization. Areas such as the functional/business, technical and human resources management must be available on a dedicated basis. This type of support is only practical when senior management recognizes and supports the effort necessary to make BPR successful.
- Business is the driver—The business and mission requirements of an agency, not technology, must be the driver in the re-engineering process. Support from IT is important, but it cannot be the driver.
- Substantial customer input is needed—A key ingredient of BPR is viewing the needs and requirements from the customer's point of view. This is true for agencies that serve the public directly and is also true for customer service within and between agencies.
- Coordination between organizations is needed—Federal programs are often linked with other activities within and without the particular agency. BPR activities must be aware of, and take into account, these links.
- Importance of appropriate use of technology—Business must be the driver to re-engineer, but technology is often the tool that allows an organization to gain real benefits from changing how it does business. Technology must be carefully matched to the problem to be solved.

- Good up front planning is critical—Good up front planning will ensure all affected parts of an organization are involved and potential bottlenecks are identified.
- Need to change agency culture—BPR often requires tremendous change in work habits and how people think about their jobs, organization and customers.

INPUT's findings during agency interviews are consistent with this GSA draft report.

2. NAPA BPR Conference March 9-10, 1994 for Agency Executives

The National Academy of Public Administration (NAPA) sponsored a conference in March 1994 for agency executives. The conference was attended by close to 400 people. Approximately 90% of the attendees were government personnel, representing 60 different agencies. The key note speaker was Dr. Carolyn Lukensmeyer, who is currently a consultant to the White House Office of the Chief of Staff. She served the NPR study as the Deputy Project Director for Management. Dr. Lukensmeyer stated that 60% of the 384 recommendations that are a part of the NPR report have been embedded in the 1995 Presidential Budget. In addition, she solicited responses from the audience that indicate the attitude of 90% of those in attendance vary from day to day relative to the potential success of BPR. Much of that uncertainty was attributed to the fact that BPR was still so new in the government.

The briefings and discussions during this conference and the results of INPUT's findings are consistent.

3. NAPA Sponsored Survey

NAPA sponsored a survey on BPR that was also reviewed at this conference. Dr. Sharon L. Caudle conducted the survey and briefed the results. This survey covered state as well as federal agencies. The following comments relate to the federal agencies only. This NAPA survey identified the following:

- The majority of the activities on BPR are new or in the planning stage

- A primary motivator for doing BPR was lack of, or a reduction in, resources to keep pace with requirements
- Little if any training had been provided on the concepts or tools necessary to do BPR
- Few of the agencies had developed a strategy for change management
- Less than one-third of the agencies participating in the survey had stated BPR goals
- Very few had senior management commitment of at least 10%

Most of the agencies participating did acknowledge that their agency business mission and goals were defined. The barriers to success of BPR were identified to be:

- Turf battles by functional officials
- Employee resistance to change
- No one with authority to push BPR across the organization
- Top management not committed.

INPUT's findings also strongly support the concern for change and change management as major issues affecting the success of BPR. INPUT's findings are consistent with this NAPA survey.

D

Summary

The INPUT interviews, GSA study, NAPA conference and survey all yield agreement on issues relative to BPR. They are:

- BPI is more prevalent than BPR
- The concept is relatively new in the federal government
- Reducing the cost of doing business was a primary motivator
- Culture change within the agencies presents the greatest challenge

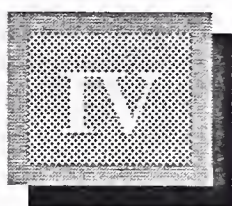
- Top-level executive commitment is mandatory for BPR activities to have any degree of success

It is obvious that there is enthusiasm for re-engineering many current processes and procedures. It is just as obvious that the federal agencies have not yet been equipped to perform the necessary planning to chart a successful course.

Many agencies can use support in planning and implementing their BPR/BPI activities. Relatively few have planned procurements to provide the needed support. Vendors and integrators that have BPR capability and experience in their own organization should capitalize on it. This experience can be used in solving the same or issues similar to those being addressed by the federal government. Where this experience exists, it should be marketed to the federal agencies.

The major expenditures will be in the design/redesign that may result from BPR analysis. Except for agencies like the IRS, FAA and DISA/CIM that initiated activities before BPR became a major thrust in the government, any procurement of significant size resulting from BPR will be two to three years away.

The following chapter reviews the NPR recommendations for the agencies that have implications for system design or redesign. The DOD DISA/CIM initiative, due to its size and the fact that it has been underway for some time, is not included. Specific military services were not covered by the NPR and are also not included in this report.



NPR Principles and Recommendations

This chapter summarizes the principles identified in the Report of The National Performance Review and the agency recommendations that have IT implications. GAO's comments on the NPR recommendations are discussed where appropriate. IT budgets and forecasts are included for the agencies discussed.

A

NPR Principles

The National Performance Review Report was published in September 1993. The NPR study was under the leadership of Vice President Gore and was performed primarily by government employees. The government employees were organized into teams that examined every cabinet department and 10 agencies. The report emphasizes that the study was just the beginning and that government reinvention will be a decade long process.

When President Clinton announced the study in March 1993, he stated: "Our goal is to make the entire federal government both less expensive and more efficient, and to change the culture of our national bureaucracy away from complacency and entitlement toward initiative and empowerment. We intend to redesign, to reinvent, to reinvigorate the entire national government."

The National Performance Review evaluated characteristics of successful businesses and defined four principles that will guide the re-engineering and redesign of government. These four principles are:

- Cutting red tape
- Putting customers first
- Empowering employees to get results
- Cutting back to basics: producing better government for less

1. Cutting Red Tape

The major items identified that will contribute to cutting red tape are:

- a. Streamlining the budget process*—A major consideration is to adopt biannual budgeting and have funds allocated to agencies by function.
- b. Decentralizing personnel policy*—This is aimed at allowing each agency to do its own recruiting, hiring, evaluating and firing.
- c. Streamlining procurement*—This addresses a shift from rigid rules to guiding principles. It also addresses GSA delegating more authority to the agencies.
- d. Reorienting the Inspector General (IG)*—This recommendation addresses challenging the IG to help prevent, rather than find, problems.
- e. Eliminating regulatory overkill*—This would challenge each agency to evaluate its internal regulations and eliminate 50% of the current regulations, improve interagency coordination and improve the process that allows waivers to regulations.
- f. Empower state and local governments*—This recommendation is basically aimed at providing a more seamless interface between the various government agencies and easing the citizen ability to deal with various levels of government.

INPUT's research and interviews found support for the first three of these items.

2. Putting the Customer First

The major recommendations in this area are:

- a. Give customers a voice and a choice*—The basic theme in this area is that the citizens served by the government should have customer service equal to the best in the business.
- b. Making service organizations compete*—This recommendation encourages the use of competition between agencies for services as well as private industry competition with public monopolies.
- c. Creating market dynamics*—This recommendation addresses restructuring functions of agencies like the FAA, GSA and HUD into private corporations and subjecting them to market dynamics.
- d. Using market mechanisms to solve problems*—This addresses government policy setting that industry should follow in areas such as worker safety, environmental protection, etc. rather than government attempting to actually solve every problem facing the nation.

INPUT's research for this study shows significant interest and support for improving customer service.

3. Empowering Employees to Get Results

The recommendations addressed under this principle are:

- a. Decentralizing decision making power*—This addresses increasing management span of control and empowering the personnel doing the work to make decisions necessary to carry out tasks.
- b. Hold all federal employees accountable for results*—This recommendation will require clearer objectives for federal programs. Along with more authority, federal employees will be charged with more responsibility and held accountable.
- c. Give federal workers the tools they need to do their jobs*— Better training and technology support for federal workers are highlighted in this recommendation.

d. Enhance the quality of work life—Industry has taken significant steps over the past few years to improve the quality of work life. The federal government needs to follow suit.

e. Form a labor-management partnership—This recommendation addresses the need to transform the adversarial relationship that dominates federal union-management interaction into a partnership for change.

f. Expert leadership—This recommendation recognizes the need for top management support to create and sustain a quality organization. It identifies, among other things, that each agency should have a chief operating officer who will be responsible for implementing NPR recommendations.

These items all have implications for culture change. A dominant concern noted in INPUT's research and related literature is government's ability to make and manage the necessary culture change.

4. Cutting Back to Basics

The recommendations in this area include:

a. Eliminate what we do not need—Major items addressed in this area are the elimination/consolidation of a number of field activities and functions across many agencies along with the elimination of duplicate activities.

b. Collecting more—This recommendation addresses allowing agencies greater freedom in setting fees for services, adds more clout in collecting debt, increases the penalty for fraud and improves the process of eliminating personnel no longer eligible for benefits from the rosters.

c. Investing in greater productivity—This recommendation addresses allowing agencies to create innovation funds that would allow long-term capital investments in people, training, technology and improved processes.

d. Re-engineer programs to cut costs—This recommendation acknowledges the need for government to use the electronic age to better perform its mission and encourages government to market

information of interest to industry, as well as other cost-cutting procedures.

The entire NPR Report addresses the specific recommendations resulting from the four principles identified. The summary is, out of necessity, only a brief overview of the recommendations made in the body of the report. Agency specific recommendations are contained in the Appendix A to the NPR report and are discussed below.

The recommendations of the National Performance Review have been sized at saving \$108 billion over five years. The study also identified the need to eliminate 252,000 federal employees.

The federal government has 1.8 million military personnel, 2.1 million civilian employees, 800,000 postal workers, and a \$1.5 trillion budget. Reinventing and re-engineering government is an enormous task. Considering the size and budget of the federal government, it is not surprising that many agencies are just beginning to undertake re-engineering their processes and procedures. Very few agencies have published their follow up studies addressing the actions to be taken relative to the NPR recommendations. For that reason, INPUT has evaluated the agency specific recommendations, identified those that have obvious IT implications and presents them in the next section of this report.

B

Agency NPR Recommendations

There are a number of agencies that have been involved in what can be equated to BPR for some time. Among them are the IRS, FAA, DISA/CIM, SSA and VA. However, for many agencies the process of re-engineering their processes and procedures is new. Agency support also varies. HUD, Labor and the GSA are among those which have top management support for BPR.

The GAO has long been critical of agency planning and asset management capabilities. At the request of several congressional representatives, GAO published a report in December 1993. This report provides initial comments on the NPR recommendations. GAO plans to continue to monitor the progress of implementation of the NPR recommendations. The GAO report acknowledges that the NPR report emphasized many of the basic issues that GAO has

previously identified—in particular those that identified the need to strengthen management within agencies and focus management and accountability on the results of programs. The GAO study expressed concern that the NPR report's recommendations assumed that agencies have the processes, systems, and qualified staff in place to accept the increased authority and responsibility that come with the deregulation and decentralization contemplated by the NPR. The report further states that GAO management reviews over the past decade have consistently shown that many agencies lack the fundamental underpinnings needed to implement the NPR recommendations. GAO specifically addressed the federal government expenditures of more than \$25 billion annually on information technology and GAO's opinion that most agencies lack the critical information needed to measure results, analyze programmatic issues, manage resources and control expenditures.

In spite of this criticism, GAO stated its agreement with the majority of the NPR recommendations. The GAO study also emphasized the need for a strong partnership between Congress and the administration to develop a coordinated long-term strategy for implementing the NPR's recommendations and improving management in the federal agencies. It appears to INPUT that, in the rush to produce the initial report, insufficient attention was paid by the NPR team to congressional involvement. Although that has contributed to contention in areas such as the GSA, future emphasis on a strong partnership will eliminate many road blocks from interfering with progress to re-engineer government. In addition, the GAO report comments on the critical role that top management must play if fundamental and cultural changes are to take place in an organization, and that such fundamental improvements take years.

The NPR recommendations for agencies that have significant IT implications have been reviewed and are discussed below. In addition, for those agencies addressed, the FY94 IT budget and INPUT forecast IT budgets through FY98 are included.

1. Department of Agriculture (USDA)

The USDA is under a congressional mandate to reorganize. The most significant recommendation made by the NPR is that USDA must reorganize and streamline and in so doing provide better service to its customers. To accomplish this objective, the USDA

will require upgraded hardware, software and network capability as well as the ability to share information across the organization. INFO SHARE is the program that the USDA has identified that will support this requirement.

Another recommendation addresses distributing food stamp benefits electronically and the USDA has initiated BPR activities in this area.

The GAO report is in full support of the recommendation relative to reorganizing the USDA and supports the concept of electronic delivery of food stamps to improve service and reduce paperwork.

2. Department of Commerce (DoC)

The National Oceanic and Atmospheric Administration (NOAA) research fleet is aging and in dire need of technology infusion. The recommendation made is that the NOAA create a pilot program to open the NOAA fleet to public and private competition. The NOAA has already initiated engineering support for this activity, and additional procurements will be forthcoming. The total program is estimated to be worth \$1.5 billion and will evolve over the next 10 years.

NPR recommends that the electronic availability of census data be expanded and suggests the Census establish a computer-based information center.

NPR recommends that Commerce establish a manufacturing technology data bank to help U. S. manufacturing firms increase their technical capabilities.

One of the major objectives of the National Information Infrastructure (NII) is to make public information more easily accessible to private citizens. The NPR recommendation is that Commerce establish a business and economic information node to the information highway.

GAO is specifically in agreement with the recommendation relative to the NOAA fleet; in general agreement with making census data more available—does not have sufficient information to judge the recommendations on the manufacturing technology data bank and the NII information node.

The DoC has initiated a procurement plan that will allow agencies of Commerce to purchase BPR services. At the present time, there are no agencies in Commerce ready to fund such activities. When there is interest within Commerce, this procurement will be pursued.

3. Department of Defense (DoD)

The NPR acknowledges the complexity of the DoD acquisition system and supports reform that will enable the DoD to take advantage of more efficient practices. There is considerable activity in Congress that addresses procurement reform in the civil agencies as well as the DoD. It is too early to predict the outcome and benefits to industry of any of these actions.

Outsourcing of a broad range of noncore DoD functions is supported by the NPR review.

The NPR review supports the use of emerging technology to upgrade care at DoD health care facilities. The DoD is currently considering an upgrade and follow on to the Composite Health Care System (CHCS). This program is identified as the Clinical Management System (CMS).

GAO agrees with the recommendation on outsourcing and health care improvements.

4. Department of Education (ED)

Every agency that manages grants has been criticized for the length of time and complexity of its process. Education is no exception, and the NPR has recommended streamlining and improving this process.

An additional area of emphasis is ED's need to develop a strategy for technical assistance and information dissemination to support its responsibility toward the National Goals 2000 program. This program was initiated under the Bush administration and has as its objective—improving the quality of education for, and the competency of, all students in America by the year 2000.

GAO has been critical of ED's leadership role in improving the nation's education system and is in strong agreement with both of these NPR recommendations.

5. Department of Energy (DoE)

The basic recommendation of interest for the DoE is that the department redirect the energy laboratories to post-cold war priorities. It essentially challenges the DoE to find new missions that will better serve the current cold-war environment. It is unlikely that the DoE will need industry support in this reinvention activity. The net result of this action may be that IT-related work, that would have been contracted to industry, will be done in-house at the DoE. In addition, industry may see the DoE competing for work from other agencies that would have normally been contracted out.

GAO is in agreement that the mission of the national laboratories needs to be redefined.

6. Environmental Protection Agency (EPA)

The most significant recommendation for the EPA relative to the IT community is that the EPA should develop strategic plans, measurable environmental goals and performance standards. Its challenge to the EPA is essentially to reinvent its management system. The EPA has come under considerable criticism for its lack of management over the past several years.

GAO is in agreement with this recommendation.

7. Federal Emergency Management Agency (FEMA)

FEMA's challenge is to reorient its focus to be prepared for, and respond to, the consequences of all disasters. Its mission has shifted from preparation for nuclear war to the current natural disasters experienced in this country. In essence, FEMA is tasked to develop a new strategy and approach to its business.

GAO's report states that the NPR recommendations relative to FEMA closely correspond to the position it has taken relative to FEMA's disaster response in recent years.

8. Department of Health and Human Services (HHS)

A major focus today at HHS is the re-engineering of its system to process disability claims. HHS has received funding from Congress to support this activity. There are several pilot programs under development, as well as the process re-engineering study. This

area is addressed in the NPR report. Full-scale implementation of a new system is several years away but is being handled by the Social Security Administration (SSA) as a priority undertaking.

Overall improvement in customer service is a key recommendation of NPR and a major objective of SSA. This will be an ongoing activity at SSA.

Although not a specific recommendation of the NPR report, HHS has initiated a BPR activity to redesign its procedures for evaluating and awarding grants.

The GAO report strongly supports the NPR recommendations relative to the SSA.

9. Housing and Urban Development (HUD)

Prior to the NPR study, the Secretary of HUD initiated an entire re-engineering activity at HUD. The majority of the work is being performed in-house. This effort is essentially aimed at improving the way in which HUD performs its mission. There are no NPR recommendations that have an immediate IT implication, but new programs should be initiated as a result of the HUD redesign work underway.

GAO is in agreement with the NPR recommendations that essentially address HUD's need to more effectively utilize resources, improve program delivery and streamline management processes and organizational structure.

10. Department of the Interior (DoI)

The DoI is one of the agencies that has published its follow up report to the NPR. It is in agreement with the recommendations and has outlined plans and actions necessary to implement the recommendations. In particular, the recommendation relative to the National Spatial Data Infrastructure (NSDI) should be of interest to the IT industry. This recommendation identifies the federal government's unique opportunity to coordinate and manage partnerships with private industry and state and local governments to develop the NSDI. The DoI report estimates that between \$8 and 10 billion per year are spent on spatial, digital data worldwide and that federal agencies spend \$4 billion on geographic data acquisition. DoI identifies the need for the Federal

Geographic Data Committee (FGDC), which is led by DoI, to have its charter strengthened and that other appropriate agencies should participate fully. The FGDC should be charged to develop a partnership plan with state and local governments and the private sector by June 1994. In addition, FGDC should be charged to submit a schedule and funding plan to the Office of Management and Budget (OMB) by September 1994.

GAO is in agreement and supports the development of a coherent vision for NSDI.

11. Department of Justice (DoJ)

The NPR report recommends that the Attorney General be designated as the Director of Law Enforcement to coordinate federal law enforcement efforts. This same recommendation and related ones are made under the Department of Treasury. This specific recommendation will not easily sell in Congress. With the emphasis from the current administration on improving crime prevention, more consolidation of systems and better sharing of information may be a reality. Several activities in this area are currently on hold, but the NPR recommendations should bring a resolution within the next six months.

The GAO is in agreement with greater coordination of the numerous law enforcement efforts, but has not taken a position on the consolidation into one or more agencies.

The NPR recommends that the Immigration and Naturalization Service's (INS) reinvent its organization and management. The recommendation addresses the need to develop an improved management structure and develop a strategic vision for the agency.

The GAO concurs with this recommendation.

12. Department of Labor (DoL)

The NPR recommends that the DoL automate the processing of ERISA annual financial reports required of plan administrators to cut costs and delays in obtaining employee benefit plan data.

The NPR recommends that the DoL establish a one-stop center that would support the American public in evaluating and selecting career opportunities.

GAO generally agrees that electronic filing of ERISA forms is a desirable method of reducing the cost of processing which is shared by the DoL and IRS. The GAO report is also in agreement with the need to streamline the employment training system, and that one-stop centers are a step in the right direction. GAO believes consolidation of similar programs across the government is a more effective goal.

13. National Aeronautics and Space Administration (NASA)

NASA has also published its report in response to the NPR recommendations. In its report, NASA recognizes the need to reorient its priorities with current national priorities. It needs to identify its mission so that it will achieve the national priority it enjoyed during the 1960s when the space program got its start. Two specific NPR recommendations identify the need for NASA to improve its contracting practices and also strengthen and restructure NASA management. NASA is currently evaluating proposals that are to provide support to NASA headquarters. One key evaluation criteria for selecting the contractor will be hands-on experience with BPR. NASA appears ready to address these NPR recommendations.

GAO agrees with these NPR recommendations.

14. Department of State (DoS)

NPR recommends that the DoS must provide leadership in the department's information management. In essence, this recommendation calls for reinventing the way the DoS manages its information technology policy.

The GAO report strongly supports this recommendation, particularly in relation to improvements in the financial management area.

15. Department of Transportation (DoT)

The need for the Federal Aviation Administration (FAA) to create a public-private consortium to develop an aeronautical telecommunications network is identified by the NPR report.

GAO is in agreement with the need for the network, but reserves full support until more information relative to the proposed consortium is available.

NPR also recommends that DOT should create and evaluate telecommuting programs.

GAO agrees that this recommendation has merit and has in the past recommended evaluation of telecommuting and transportation-related behavior.

16. Department of the Treasury (TRE)

As mentioned above, NPR has recommended consolidation of law enforcement agencies under the Attorney General to be designated as the Director of Law Enforcement.

NPR supports the continuation of the Tax System Modernization (TSM) program which is in its initial phases at the Internal Revenue Service (IRS).

The NPR report also recommends changes in Customs' organization and management processes to provide an improved management structure and strategic vision. This represents another significant BPR activity.

The GAO is in complete agreement with the need to modernize the IRS and also with Customs' need to institute a strategic planning and management process.

17. Department of Veterans Affairs (DVA)

The NPR recommendations relative to the DVA include the need to: develop a master veterans records system and modernize the department's information infrastructure; modernize the benefits claims processing; improve its focus on service to the veterans and their families as customers; and improve business practices through electronic commerce. The DVA has recognized the need to improve its overall customer service and has initiated program and process re-engineering efforts to address these recommendations. The VA is experimenting with kiosk systems and planning procurements that use telephone systems to deliver a wide range and improved service to its customers.

The GAO strongly supports these NPR recommendations.

C

Federal Agency IT Spending

To the extent that agencies are aware of their information technology requirements in time to budget their activities, their numbers are reported to Office of Management and Budget (OMB). These numbers are developed at least two years prior to incorporation into the president's budget. Therefore, numbers that appear in the current president's budget (fiscal year 1995) were developed before the National Performance Review. These numbers do not reflect the emphasis of NPR to incorporate technology into the re-engineering initiatives.

Exhibit IV-1 illustrates the planned contract spending levels for agencies discussed in Section B. The compound annual growth rate (CAGR) for the forecast federal government IT market overall, based only on OMB numbers, is 6%. Agency IT spending will likely increase beyond the OMB numbers based on recommendations from NPR that IT should become the vehicle that agencies can ride to attain "improved performance at lower cost". With very little guidance at this point in exactly how the agencies will use IT, or at what levels additional IT resources will be made available to them, it is impossible to project realistic spending levels. Even an examination of the OMB numbers generated for the fiscal 1995 budget, not yet made public, most probably will not yield significant indicators of an increased spending level.

Higher than normal growth rate is expected for the Department of Defense agencies. The DoD will centralize a large number of programs with the Defense Information Systems Activity (DISA). The result will be a lower growth rate for the military services.

Funding for many of the Department of Treasury programs has been established at a constant spending rate. The agency's own forecast for its spending rate shows a decline. The high actual spending level appears to be committed to programs already defined or in the process of award.

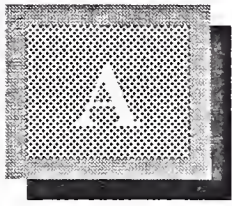
Exhibit IV-1

Contracted Portion of Federal IT Budget

Agency	1994 (\$M)	1998 (\$M)	CAGR 1994-1998 (%)
Agriculture	471	571	5
Commerce	393	492	6
DoD -			
Air Force	1,229	1,454	4
Army	1,316	1,599	5
Marines	70	90	6
Navy	1,057	1,328	6
OSD	2,823	3,940	9
Education	217	245	3
Energy	1,548	1,859	5
EPA	600	736	5
FEMA	24	31	7
HHS	1,100	1,459	7
HUD	109	137	6
Interior	256	310	5
Justice	584	693	4
Labor	88	105	5
NASA	1,924	2,350	5
State	167	205	5
Transportation	1,966	2,405	5
Treasury	1,254	1,249	-.1
Veterans	299	359	5

Source: INPUT

An overall information technology spending level increase of 5% to 10% can be expected for these agencies in order to accomplish re-engineering requirements growing from the NPR. Exactly how this money will be distributed will depend on how the individual programs are recast to take advantage of new technologies, and which programs are most supportive of the administration's priorities such as health care, high performance computing, information superhighway, service to the citizen, as well as some lesser priority initiatives.



Questionnaire

A

Survey Letter

February 22, 1994

Dear Agency Official:

As part of its continuing program to respond to vendor and system integrator interest in federal agency planning and related information technology programs, INPUT is examining the business process re-engineering activities (BPR) in the federal government. Of particular interest is the extent to which each agency is planning or implementing BPR as a result of the President's commitment to re-invent government.

Commercial and industrial experience with business process re-engineering or similar activities offers potential benefits to agencies who are currently involved or moving to meet the National Performance Review objectives. Industry awareness of federal agency perceptions, and other specific issues within federal agency programs, is important if agencies want to take best advantage of available capabilities and experience from the marketplace.

We would like to include your organization's activities and interests in business process re-engineering in our survey and, in return, inform you of the activities and interests in other federal agencies. We will do that by providing a copy of the Executive Summary of our report on business process re-engineering to each agency that participates. Sharing of experiences and solutions between agencies offers a means to leverage and reduce costs which is critical in today's tight-budget environment. Your organization's participation is important in developing the best overall descriptive information relative to business process re-engineering in the federal government.

I manage INPUT's Federal Market Analysis Program which services industry by performing special studies such as this on BPR. In the next few days, a senior research analyst from my staff or I will be calling your office to get the names of the most appropriate officials on your staff to assist me in collecting the necessary information. I anticipate that no more than fifteen minutes will be required to complete subsequent telephone interviews. As always, interviews are treated as confidential. Only summary information is released to the public—agency officials will not be identified.

I appreciate how busy you and your staff are and would like to thank you in advance for your cooperation.

Sincerely,

Nancy R. Vesper
Manager
Federal Program

B**Questionnaire**

1. How does your agency characterize or define BPR?

2. To what degree is your agency focusing on BPR?

- ☐ Selected areas
- ☐ Entire organization

3. Which are the primary focus areas?

- ☐ Finance
- ☐ Procurement
- ☐ Program management
- ☐ Training
- ☐ Other, please identify

4. How long has your agency been doing BPR?

- ☐ < 6 mo.
- ☐ 6-12 mo.
- ☐ 1-2 years
- ☐ > 2 years

5. Are your agency objectives incremental or comprehensive changes?

- ☐ Incremental
- ☐ Comprehensive
- ☐ Depends on function

6. What is the primary motivation for undertaking BPR? Check all that apply.

- ☐ Cost reduction
- ☐ Mission refinement
- ☐ Personnel cuts
- ☐ Improved productivity
- ☐ Technology insertion
- ☐ Customer satisfaction
- ☐ Other, please identify _____

7. How long from the time your agency initiated BPR before you anticipate measurable results?

- ☐ < 6 mo.
- ☐ 6-12 mo.
- ☐ 1-2 years
- ☐ > 2 years

8. How will your agency measure success?

- ☐ Dollar savings
- ☐ Time savings
- ☐ Personnel reductions
- ☐ Other, please identify _____

9. What is your level of confidence that your agency will meet its objectives in BPR?

- ☐ 0 %
- ☐ > 20 %
- ☐ > 50 %
- ☐ > 80 %
- ☐ 100 %

10. What are the major impediments in achieving stated objectives:

- ☐ Political pressures
- ☐ Personnel policies
- ☐ Lack of executive commitment or follow through
- ☐ External regulations
- ☐ Internal regulations
- ☐ Enormity of task
- ☐ Other, please identify _____

11. Is your agency currently using or planning to use outside consultants to support BPR?

- ☐ Yes
- ☐ No

12. Which vendors do you believe have expertise and experience to do BPR?

13. Do you anticipate significant system redesign as a result of BPR?

- ☐ Yes
- ☐ No

14. Is your agency currently performing or planning system redesign as a result of BPR?

- ☐ Yes
- ☐ No

15. If you are doing or planning system redesign, will you use outside vendors or system integrators?

- ☐ Vendors
- ☐ System Integrators
- ☐ BPR consultants
- ☐ No outside support

16. How significant do you feel the following will be in any system design/redesign resulting from BPR? (Rank 1, 2, etc. from most to least significant)

- ☐ Hardware
- ☐ Software
- ☐ Networks
- ☐ Professional services

C

List of Agencies Interviewed

DOC, Office of Information Planning

EPA, Office of IRM

GAO, Office of Information Management and Communications

GPO, Office of Planning

HHS, Office of Information Systems management Administration
for Children and Families

HHS/SSA, Office of IRM

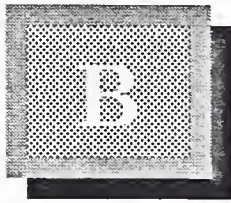
NASA, Automated Information Management Program

TVA, Information Services

USDA, Food and Nutrition Service

USDA, Office of Agriculture Stabilization and Conservation

USDA, Office of IRM



Glossary of Acronyms and Definitions

A

Acronyms

BPI	Business Process Improvement
BPR	Business Process Re-engineering
CAGR	Compound Annual Growth Rate
CHCS	Composite Health Care System
CMS	Clinical Management System
DISA/CIM	Defense Information Systems Agency/Center for Information Management
DoC	Department of Commerce
DoD	Department of Defense
DoE	Department of Energy
DoI	Department of Interior
DoJ	Department of Justice
DoL	Department of Labor
DoS	Department of State
DoT	Department of Transportation

DVA	Department of Veterans Affairs (also VA)
ED	Department of Education
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FGDC	Federal Geographic Data Committee
GAO	General Accounting Office
GDP	Gross Domestic Product
GSA	General Services Administration
HHS	Health and Human Services
HUD	Housing and Urban Development
IG	Inspector General
INS	Immigrations and Naturalization Service
IRS	Internal Revenue Service
IT	Information Technology
NAPA	National Academy of Public Administration
NASA	National Aeronautical and Space Administration
NII	National Information Infrastructure
NOAA	National Oceanic and Atmospheric Administration
NPR	National Performance Review
NSDI	National Spatial Data Infrastructure
OMB	Office of Management and Budget
SSA	Social Security Administration
TRE	Department of the Treasury

TSM	Tax System Modernization
TVA	Tennessee Valley Authority
USDA	Department of Agriculture
VA	Department of Veterans Affairs (also DVA)

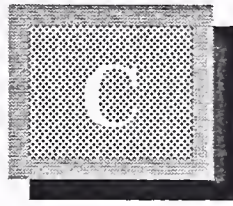
B

Definitions

BPI - Business process improvement is defined to be the examination of business processes to achieve incremental improvements in measures of performance such as cost, quality service, and speed.

BPR - Business process re-engineering is defined to be the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.

(Blank)



References/Sources

Budget of the United States Government, Fiscal Year 1995.

Government Business Process Re-engineering: Agency Survey Results, Dr. Sharon L. Caudle, NAPA, January 1994.

Lessons Learned to Date From Business Process Re-engineering in the Federal Government, GSA, February 1994.

Management Reform, GAO's Comments on the National Performance Review's Recommendations, December 1993.

Executive Summary, Report of the National Performance Review, Vice President Al Gore, September 1993.

Report of the National Performance Review, Vice President Al Gore, September 1993.

Department of the Interior, Accompanying Report of the National Performance Review.

Improving Customer Service, Accompanying Report of the National Performance Review.

Improving Regulatory Systems, Accompanying Report of the National Performance Review.

National Science Foundation/Office of Science and Technology Policy, Accompanying Report of the National Performance Review.

Re-engineering Through Information Technology (draft), Accompanying Report of the National Performance Review.

Rethinking Program Design, Accompanying Report of the National Performance Review.

Strengthening the Partnership in Intergovernmental Service Delivery, Accompanying Report of the National Performance Review.

°

